## (19) World Intellectual Property Organization International Bureau



## 

(43) International Publication Date 1 September 2005 (01.09.2005)

**PCT** 

## (10) International Publication Number WO 2005/080297 A1

(51) International Patent Classification7: C05F 11/00

C05G 3/00.

(21) International Application Number:

PCT/IB2004/000352

(22) International Filing Date: 23 January 2004 (23.01.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(71) Applicant and

(72) Inventor: MWAURA, Simon, Njoroge [KE/KE]; Tena Estate 476, P.O. Box 78381-00507 Viwandani, Nairobi (KE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

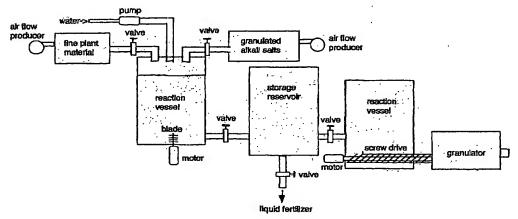
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD OF CONVERTING AQUATIC PLANTS ESPECIALLY HYACINTH INTO USEFUL PRODUCTS



(57) Abstract: A process is disclosed for converting aqueous plants, especially hyacinth, into liquid fertilizer and solid by-products suitable for addition to livestock feed or manufacture of paper. The method comprises placing the aquatic plants together with sufficient water in a tank, and blending the mixture to finely divide the plant matter. The finely divided plant matter is then mixed with an aqueous solution containing alkali salts to dissolve nutrients such as nitrogen, phosphorus and potassium. The solution is then separated from the remaining solid plant matter, providing a liquid fertilizer composition and a solid residue rich in protein, carbohydrates and fiber. Quantities of plant material, water and alkali salts can be selected so that the solution solidifies in a reaction vessel and can then be granulated for convenient storage, transportation and use.